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ABSTRACT

The Ohio state-funded SchoolNet initiatives include two major components: "SchoolNet" and "SchoolNet Plus." SchoolNet provides telecommunications wiring among classrooms in individual school buildings; it also provides computers for low-wealth districts and supports technology-related professional development. SchoolNet Plus provides computers and related equipment to elementary schools in districts which have low property value. This report, the fourth in a series, summarizes the major findings of previous reports and provides updated information. As of September 1996, all but 25 of Ohio's 611 school districts had submitted a SchoolNet application and SchoolNet Plus funds had been distributed to 520 districts. Of applications submitted, only 30 had not yet been approved and were undergoing revisions. In general, districts' SchoolNet and SchoolNet Plus activities during the 1995-1996 school year involved planning, attempting to rearrange budgets or find additional funds for equipment, making building improvements, and professional development for staff. Over 100 people, including teachers, district and state administrators, and technology experts were interviewed on SchoolNet initiatives. In addition, 250 teachers and 250 principals in 500 randomly selected schools were surveyed, as well as 24 regional sites of the Ohio Education Computer Network and some of the school districts they serve. Funding recommendations are outlined and selected states' technology programs are discussed. A table depicting the groups making SchoolNet policy decisions prior to October 1996 is appended. (Author/AEF)

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Ohio SchoolNet Initiatives: Findings of the Legislative Office of Education Oversight

ED 404 982

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LEGISLATIVE OFFICE OF EDUCATION OVERSIGHT
Columbus, Ohio
December 1996

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The Legislative Office of Education Oversight (LOEO) serves as staff to the Legislative Committee on Education Oversight. Created by the Ohio General Assembly in 1989, the Office evaluates education-related activities funded wholly or in part by the state of Ohio. This LOEO report is the fourth in a series of reports on Ohio's SchoolNet initiatives. It summarizes the three previous reports and provides updated information. ***Conclusions and recommendation in this report are those of the LOEO staff and do not necessarily reflect the views of the Committee or its members.***

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Ohio SchoolNet Initiatives:
Findings of the Legislative Office of Education Oversight

This report is the fourth in a series of Legislative Office of Education Oversight (LOEO) reports focusing on SchoolNet initiatives. It summarizes the major findings of the previous reports and provides updated information. Previous reports were:

- *Description of SchoolNet, SchoolNet Plus, and the Ameritech Agreement* — *October, 1995*
- *Ohio SchoolNet Initiatives: School Readiness for Computers and Networks* — *June, 1996*
- *Ohio SchoolNet Initiatives: The Role of the Ohio Education Computer Network* — *August, 1996*

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The SchoolNet initiatives were created through the combined efforts of Ohio's executive and legislative branches. SchoolNet was first funded in the FY 1994-1995 capital appropriations bill; SchoolNet Plus was first funded in the FY 1996-1997 operating budget bill.

As of September, 1996, all but 25 of Ohio's 611 school districts had submitted a SchoolNet application and SchoolNet Plus funds had been distributed to 520 districts. Of applications submitted, only 30 had not yet been approved and were undergoing revisions. In general, districts' SchoolNet and SchoolNet Plus activities during the 1995-1996 school year involved planning, attempting to rearrange budgets or find additional funds for equipment, making building improvements, and professional development for staff.

LOEO examined the SchoolNet initiatives by interviewing over 100 people, including teachers, district and state administrators, and technology experts. We also surveyed 250 teachers and 250 principals in 500 randomly selected schools as well as 24 regional sites of the Ohio Education Computer Network and some of the school districts they serve.

Structure of SchoolNet Initiatives

SchoolNet provides telecommunication wiring among classrooms in individual school buildings, computers for low-wealth districts, and professional development related to technology.

The state-funded SchoolNet initiatives include two major components, "SchoolNet" and "SchoolNet Plus." Since 1994, the General Assembly has allocated $397 million for these initiatives -- $122 million for SchoolNet and $275 million for SchoolNet Plus.

SchoolNet provides telecommunication wiring among classrooms in individual school buildings; it also provides computers for low-wealth districts and supports professional development related to technology. It does not provide connections beyond the building. In most school districts, computers and related equipment must be paid for by other sources. These sources include the local tax dollars, state grants, or federal programs.

SchoolNet Plus provides computers and related equipment to elementary schools in 459 "qualifying districts" and partially subsidizes their purchase in remaining districts.

SchoolNet Plus provides computers and related equipment to elementary schools in 459 "qualifying districts" and partially subsidizes their purchase in remaining districts. Qualifying districts have low property valuation and per-pupil expenditures or serve more than 9,000 students, 18% of whom come from families receiving Aid to Dependent Children (ADC). These districts are eligible to receive the amount necessary to provide one workstation and software for each five children in Kindergarten through Grade 4.

If money remains in the SchoolNet Plus fund after qualifying districts have received their allocations, other districts are eligible to apply for it, provided they pay at least 50% of the cost of workstations. After all school districts have received sufficient amounts to provide one workstation for each five children in Kindergarten through Grade 4, any district can apply for remaining money to purchase workstations for children in any grade, provided the district contributes half of the cost.

The SchoolNet office encourages districts to use SchoolNet Plus money to provide computers and software for all of their K-4 classrooms. However, some districts have chosen to initially provide many computers in particular elementary schools and few or none in others. Selected schools will receive computers in not only the K-4 classrooms, but perhaps in fifth- and sixth-grade classrooms and

libraries. The remaining schools will receive computers as additional money becomes available. In some districts, not all schools have the physical infrastructure to support computer use, so the district initially has concentrated computers in selected schools. Other districts have preferred to concentrate equipment in computer laboratories.

Senate Bill 230 made extensive changes to SchoolNet administration. It replaced the SchoolNet office with the Office of Information, Learning, and Technology Services (OILTS).

The original organization of the SchoolNet administration was complex, reflecting the interests of various stakeholders. Five groups with overlapping membership made policy decisions. A table summarizing the membership of these original groups is found in Appendix A. Initially part of the Information Management Services Division of the Ohio Department of Education (ODE), the SchoolNet office was responsible for policy administration and implementation. The SchoolNet office was under the joint leadership of a Program Leader and a Director of SchoolNet Wiring and Workstations.

Senate Bill 230, passed in July 1996, made extensive changes in SchoolNet governance. The bill replaced the original SchoolNet office with the Office of Information, Learning, and Technology Services (OILTS). It replaced the five groups involved in SchoolNet policy decisions with a Technology Advisory Committee, who was charged with developing policies for the OILTS and overseeing and monitoring their activities.

The Technology Advisory Committee consists of nine members, five of whom may vote. These five include one member appointed by the governor, the State Superintendent of Public Instruction, the director of the Department of Administrative Services, the chair of the Public Utilities Commission of Ohio, and the director of the Ohio Education Telecommunications Network Commission or their designees. The four non-voting members include two members of the House of Representatives and two of the Senate.

The Office of Information, Learning, and Technology Services (OILTS) is exempt from many of the chapters of the Revised Code that ensure accountability.

The OILTS is a semi-autonomous agency and is exempt from the provisions of Chapters 123., 124., 125., and 153. of the Ohio Revised Code. The OILTS no longer must submit its plans and cost estimates to the Department of Administrative Services (DAS) for approval. It is not required to include minority set-asides in its purchase of equipment or services. It is not bound by civil service employment procedures, competitive bidding requirements, the DAS personnel board of review, pay ranges that apply to other state workers, the standard 40-hour workweek, whistle-blower protection, sick leave policy, or limits to political activity. The OILTS also has its own collective bargaining unit.

However, the OILTS is still required to obtain controlling board approval for any expenditure greater than $50,000. The office's autonomy has increased some costs and responsibilities. It now must deal directly with the Department of Administrative Services. The OILTS now must contract with, and pay for the services of, the Education Management Information System (EMIS). Legal services currently provided by ODE may not be available.

The new Office of Information, Learning, and Technology Services will coordinate statewide implementation.

According to Senate Bill 230, the OILTS is supervised by a director who is appointed by the State Superintendent of Public Instruction and approved by the Technology Advisory Committee. The Act outlines the activities of the OILTS, which:

- makes grants to districts for technical assistance, professional development, and support services;
- contracts, as necessary, for administration and implementation of programs;
- establishes a reporting system to account for grant expenditures;
- implements policies of the Technology Advisory Committee; and
- may establish a systems support network.

The new Office of Information, Learning, and Technology Services, formerly known as the SchoolNet office, will coordinate statewide implementation. The SchoolNet Program Leader expects that the OILTS will continue to:

- provide leadership to help schools use the SchoolNet infrastructure to support learning;
- connect SchoolNet to other national and regional initiatives;
- provide feedback between policy makers and schools;
- determine benchmarks and assessment that will demonstrate efficacy of SchoolNet; and
- ensure that evaluation of SchoolNet implementation occurs.

The OILTS currently has six employees engaged in SchoolNet procurement; six focusing on SchoolNet learning, teaching, and technology; two support staff; four contractors providing additional technical consultation or expertise; and 20 regional SchoolNet faculty. Because of OILTS's independent status within ODE and the creation of an independent bargaining unit, several current SchoolNet office personnel may leave OILTS and return to other positions within ODE.

According to the Program Leader, eventually a director of OILTS will be "responsible for the whole shebang." The Program Leader hopes that the exemption of OILTS from state salary schedules will make it possible to attract a director with technical expertise. Prior to implementation of OILTS autonomy, salaries allowed under state schedules were about half or less of what private industry and even local school districts offer.

The Ohio Education Computer Network (OECN) is currently the most cost-effective means of connecting school buildings and districts with each other and the world beyond school walls.

One of the expectations of SchoolNet held by policymakers and educators is that it will allow students and teachers to communicate beyond the four walls of individual classrooms. Many districts plan to use the Ohio Education Computer Network to provide this communication beyond individual buildings. The Ohio Education Computer Network (OECN) preceded the SchoolNet initiatives. Originally established in 1979 to provide cost-effective accounting services to school districts, it began to provide electronic transmission of the data from the Education Management Information System (EMIS) in 1989. Currently 24 regional sites provide services to the state's school districts. This electronic network could eventually connect up to 1.8 million students and 95,000 teachers.

The General Assembly has invested nearly $229 million in the OECN and the EMIS. LOEO determined that the OECN is currently the most cost-effective means of connecting school buildings and districts with each other and the world beyond school walls. However, at least eight of the 24 regional sites need to improve the quality of all of their services.

Rapid changes in classroom and communication technology may change the cost-effectiveness of the OECN. The federal Telecommunications Act of 1996 could substantially reduce the cost of access to on-line services.

Hardware and software systems that provide distance learning are too expensive for many school districts to purchase.

Many educators and policy makers hope that distance learning will provide a partial solution to funding equity issues. However, hardware and software systems that provide distance learning are too expensive for many school districts to purchase. If Ohio intended to provide just one distance learning classroom in one school in each of the state's 200 low-wealth districts, the total one-time cost would be nearly $16 million. An additional $1.3 million per year would be needed to pay for switching and scheduling services and to connect to the sites providing instruction.

SchoolNet Start-up

Approximately half of Ohio's schools are not immediately ready to use the computers and networks that are available through SchoolNet and SchoolNet Plus.

In January 1996, LOEO surveyed 500 randomly selected schools across Ohio. We found that Ohio schools have strengths on which to build as they begin to implement the SchoolNet initiatives. There is strong teacher and administrator interest in use of computers; districts have extensive technology plans in place; and most teachers use computers in some capacity.

However, approximately half of Ohio's schools (52%) are not immediately ready to use the computers and networks that are available through SchoolNet and SchoolNet Plus. Socioeconomic conditions of a district and the age of buildings affect the readiness of schools. In general, 36% of city schools, 44% of rural schools, and 65% of suburban schools are prepared to use computers and networks in the classroom.

The most pervasive obstacle is the need for electrical upgrades. Other obstacles include providing professional development and technical assistance and keeping up with new technology developments.

Widespread obstacles include providing adequate professional development and technical assistance. Although many schools provide some computer-related professional development, they seldom meet this need adequately. Time for teachers to participate in professional development activities is scarce and a lack of substitute teachers makes scheduling these activities challenging. Finding personnel to provide technical assistance, such as network administration, hardware maintenance, or software troubleshooting, is difficult. People with the education experience and necessary technical skills are in limited supply and great demand.

Obtaining adequate numbers of up-to-date computers and continuing to keep up with new developments of hardware and software is an ongoing issue. The need for acquisition of computers will not end with the first provisions of computers. Schools must address their ongoing need for upgrades.

The most pervasive obstacle for schools preparing for the SchoolNet initiatives, however, is the need for electrical upgrades. Nearly all schools determined by LOEO to be unready for SchoolNet need electrical upgrades. Some need increases in their electrical capacity; some need an increase in the number of electrical outlets; many need both.

The SchoolNet Plus funds allowed to be used for electrical upgrades would be sufficient to improve most K-4 classrooms, if they were the only classrooms that needed electrical upgrades.

The maximum amount of money a qualifying district can receive from SchoolNet Plus is based on its number of K-4 students. It will receive up to $3,200 for each five students in those grades, or about $16,000 for each 25-student classroom in those grades. Districts are permitted to use up to 10% of their SchoolNet Plus funds for electrical upgrades. If SchoolNet Plus funds for electrical upgrades were used only for K-4 classrooms, they would provide about $1,600 for each room. However, schools' needs for electrical upgrades are not limited to K-4 classrooms.

Consider a hypothetical small district that has only one high school, one junior high, and one elementary school. The elementary school has 350 students in 14 classrooms, kindergarten through sixth grade. Based on the school's K-4 enrollment of 250, the district will receive up to $160,000 in SchoolNet Plus funds, $16,000 of which may be spent for electrical upgrades. In order to use SchoolNet wiring and SchoolNet Plus computers in this particular school, the district must upgrade the school's electrical system. If only the 10 K-4 classrooms get electrical upgrades, $1,600 is available for each classroom.

In most elementary schools, however, K-4 classrooms account for only some of the space that needs electrical upgrades. Further, elementary schools are not the only buildings that need electrical upgrades before they can use SchoolNet.

However, the school has 10 additional rooms -- four classrooms for fifth and sixth graders, an office, an art room, a music room, a gymnasium, a library, and a special education resource room. In order to become part of the SchoolNet network these rooms will need computers. The computers require adequate electrical infrastructure. If the district decides to provide electrical upgrades in all rooms of this elementary school, it is unlikely that the $16,000 in SchoolNet Plus funds will suffice. If the district needs electrical upgrades in its other two schools, this $16,000 will provide only a small portion of the cost.

Although the percentage of SchoolNet Plus money permitted to be used for electrical upgrades is uniform across qualifying districts, the needs for and cost of those upgrades is not. In order to understand the actual costs involved in providing electrical improvements, LOEO contacted 19 districts that had recently completed electrical upgrades needed to accommodate SchoolNet equipment in 35 schools.

Spending in these 19 districts reflected the wide variety of conditions among Ohio schools. One district needed virtually no electrical upgrades. In another, electrical upgrades were included in replacing the district's three schools. It had cost less to replace the three buildings than it would have cost to retrofit them. In 32 other schools in the remaining 17 districts, costs for electrical upgrades ranged from approximately $185 per classroom to more than $3,300 per classroom; or about $7 per pupil to approximately $270 per pupil.

In the districts LOEO contacted, the cost per classroom was related to the age of the building. The average cost per classroom in 19 buildings less than 40 years old ranged from $142 to $239; the cost per classroom exceeded $1,600 in only one of these buildings (5%). According to a district architect, old, heavy buildings constructed with load-bearing walls cost considerably more to rewire than do relatively new buildings with drop ceilings or wiring ducts. For the 13 buildings more than 40 years old, the average cost per classroom ranged from $300 to $3,571; the cost exceeded $1,600 in five of these buildings (38%).

Analysis of these costs in 32 schools indicated that, in most districts, the 10% of SchoolNet Plus funds would be sufficient to provide electrical upgrades if ONLY the K-4 classrooms needed them. In old buildings, it would be insufficient to provide electrical upgrades, even for just K-4 classrooms. Electrical upgrades are needed, however, not just in K-4 classrooms, but throughout entire elementary buildings and in the districts' middle and high schools as well.

Many schools approved for SchoolNet spent the year waiting for the state contractor to complete its wiring.

The state awarded the contract for installation of telecommunication wiring to Norstan Communications Corporation. School districts may choose to use other suppliers, but those who do so will not be reimbursed in cash. Instead, they will receive "technology credits" for future SchoolNet acquisitions. As of September 1996, approximately 8,900 of Ohio's 100,000 classrooms had been wired for SchoolNet. Many schools approved for SchoolNet spent the year waiting for Norstan to complete its wiring.

Districts that undertook the installation of SchoolNet wiring dealt with being the first participants in a massive effort. According to both district administrators and SchoolNet personnel, the performance of the state contractor was inconsistent. A SchoolNet administrator stated that the contractor based its initial planning on conditions in four fairly small school districts with high proportions of new schools. Also, the company apparently did not initially understand the timeframes necessary to install SchoolNet wiring in so many districts

simultaneously. Finally, the state contractor subcontracted 100% of the SchoolNet wiring to other companies, many of which subcontracted further. Workers actually installing wiring had no direct communication with, or accountability to, the state contractor. An individual district's experiences with the "state contractors" depended largely on which subcontractor was actually installing SchoolNet wiring.

The SchoolNet office responded to the districts' complaints about the state contractor. In August 1996, the difficulties encountered by many districts prompted the SchoolNet office to inform the state contractor that unless it met its deadlines, litigation would ensue. The SchoolNet office also enlarged its effort to inform school districts of the realities of the installation process. For example, it has attempted to dispel the misconception that the state contractors have one large fleet of trucks working out of one central site. Through the SchoolNet office communications, many school personnel now understand that the "state contractors" actually include many local subcontractors.

Although there is no statewide mandate to do so, individual education colleges have responded to current teacher standards by developing a few courses dedicated to technology use or including some technology ideas in other education courses.

Individual colleges and universities have responded to current teacher standards, in place since 1985, by developing a few courses dedicated to technology use or including some technology ideas in other education courses. Although the Ohio Board of Regents has invested time and effort into creating a statewide vision for technology, it does not have the power to mandate that colleges and universities prepare future teachers to use computers as a teaching tool.

Although current standards require teachers to be able to select, prepare and use education media, coursework developed in response to this requirement is viewed by technology proponents as minimal and inadequate. ODE has proposed new teacher licensing standards, which will require new teachers to demonstrate that they can use technology to help students learn. Six of the proposed teacher licensing standards relate to technology. The standard most likely to affect course offerings of colleges reads:

> The teacher utilizes educational technology to broaden student knowledge about technology, to deliver instruction to students at different levels and paces, and for advanced levels of learning.

In order to prepare their students to meet this standard, most colleges of education will have to increase their use of technology in preparing new teachers.

For their students to meet proposed new teacher licensing requirements, most colleges will have to increase their use of technology in preparing new teachers.

As they increase their use of technology in teacher preparation, colleges and universities face some of the same challenges that K-12 schools have encountered. Faculty members who are responsible for teaching preservice classes need both equipment and training. Further, the institution must have and communicate expectations that faculty will include technology in the academic activities of its preservice students. In many cases, these expectations are absent. Even when equipment and training are available, colleges of education do not reward their faculty for activities that involve technology.

Researchers report that adding technology courses or subject matter to preservice training has a limited effect on teachers' classroom use of computers after graduation. For example, one researcher surveyed 167 undergraduate future teachers about their computer skills, their college coursework related to technology, and their expectations concerning classroom computer use. Most (97%) expected to use computers in the classroom in many ways. After graduation and one year of teaching experience, the same people were surveyed about their classroom use of computers. The researcher found that no matter how complete their college technology courses, or how well developed their personal computer skills, most used computers much less frequently and for fewer kinds of activities in the classroom than they had expected. Only 61% of the teachers in this study used computers in the classroom in any capacity.

The Office of Information, Learning, and Technology Services is contracting an evaluation of the Ohio SchoolNet initiatives.

The Office of Information, Learning, and Technology Services is contracting an evaluation of the Ohio SchoolNet initiatives. In August, 1996, the SchoolNet office released a Request for Proposals (RFP) seeking an organization to evaluate these initiatives over the next four years. During the development of the RFP, SchoolNet personnel requested LOEO to review their ideas, to ensure that the evaluation would meet the needs of the General Assembly. The emphasis of the evaluation will be on the effects of the SchoolNet initiatives on student learning, professional development, and technology infrastructure. The closing date for submission of proposals was October 1996.

Recommendations

To improve the effectiveness of SchoolNet and SchoolNet Plus funding, the Legislative Office of Education Oversight makes the following recommendations:

- The General Assembly should permit some flexibility, perhaps based on the age of individual districts' buildings, in the percentage of SchoolNet Plus funds that districts may use for electrical upgrades.

- The General Assembly, in cooperation with the Governor's office and the Ohio business community, should support a statewide effort to muster local support for electrical upgrades.

- The General Assembly should continue to invest in the Ohio Education Computer Network as the current best solution to providing access to on-line networks for student use. The cost-effectiveness of Ohio Education Computer Network services should be evaluated on an ongoing basis.

- The Ohio Department of Education should determine the extent of the Ohio Education Computer Network's role in the SchoolNet initiatives. The minimum level of service that each regional site must offer to qualify for state subsidy should be established. The General Assembly should discontinue subsidies to the regional sites that do not provide this minimum level of service.

- Given the expense of distance learning, the General Assembly should consider whether it is simply too expensive to fund; whether it should be provided to only the most isolated school districts; or whether it should be provided for all low-wealth schools.

- The General Assembly should consider the cost-effectiveness of distance learning. Because of the high cost of equipment, if additional evaluation determines that this technology does not improve student learning, state funding should be eliminated.

- Given the extensive exemptions to the chapters of the Ohio Revised Code that ensure agency accountability, some alternative method of ensuring accountability of the Office of Information, Learning, and Technology Services should be developed.

- The Office of Information, Learning, and Technology Services should investigate alternative methods of technology financing, including the strategy of leasing.

- In order to reduce the state-contracting bottleneck that often delays installation of SchoolNet telecommunication wiring, the Office of Information, Learning, and Technology Services should not discourage districts from using competent local contractors.

- The Office of Information, Learning, and Technology Services should continue to consider the information needs of the General Assembly as it completes its evaluation of the SchoolNet initiatives.

The National Picture

Among all 50 states, Ohio is providing one of the most comprehensive state-funded computer initiatives.

Ohio is not alone in its push to improve school technology. Other states are moving in similar directions. Among all 50 states, Ohio is providing one of the most comprehensive state-funded computer initiatives. Although many states have established technology programs, the $397 million Ohio has invested in its SchoolNet initiatives is more than other large states have devoted to similar efforts. To understand the extent of Ohio's effort, LOEO examined programs in other states with initiatives that most closely resemble SchoolNet.

Delaware is in the process of wiring its 7,000 public classrooms to provide high speed telecommunications, Internet access, and video, computer, and voice exchange capabilities. The state estimates that the entire project will cost $80 million, yet it has only appropriated $30 million over three years.

Iowa's interactive fiber optic Iowa Communications Network links the state's entire educational system, from elementary to higher education. Its focus is distance learning. The state has committed to spending $186 million on school technology through the year 2000. The state of Iowa pays for all wiring between school districts; each district is responsible for wiring its own buildings.

Kentucky's Education Technology System hopes to provide one cordless phone, one video, and four to six active network connections in every classroom; one networked computer for every six students; and one networked computer for every teacher by 1998. The Kentucky legislature has appropriated $135 million into a non-lapsing trust fund -- districts who apply for technology dollars receive annual amounts based on average daily attendance and must match the state funds dollar-for-dollar.

Tennessee has implemented a statewide networking and workstation technology plan for K-12 education that is very similar to Ohio's SchoolNet initiatives. By 1997, Tennessee will have spent a total of $98.9 million on its statewide educational technology. The highlight of Tennessee's efforts is found in its 5,459 21st Century Classrooms, which include an interactive video system and a teacher specially trained in the use of educational technology.

The federal involvement in Ohio schools' move toward technology integration is limited; federal funds are a very small part of the money providing Ohio's education technology.

The federal "Goals 2000" includes the hope that by "the year 2000, every adult will possess the knowledge and skills necessary to compete in a global economy." The suggested strategy includes "a new generation of American schools" that include computers and electronic networks. However, the role of the federal government in assisting states to achieve technology integration is minor and disjointed. Federal funds are a very small part of the money supporting Ohio's education technology. These funds are distributed using a patchwork of mechanisms -- there is not a "technology block grant" or one central source that provides money that states, schools, or districts can use for classroom technology. The 1997 federal budget includes a Technology Literacy Challenge of $200 million to be distributed among 50 states. This amount is less than the $397 million Ohio's legislature has provided for its one-state SchoolNet initiatives.

Some long-existing education programs that once limited use of grant money have become more flexible. For example, in 1995 about $450 million in Elementary and Secondary Education Act (ESEA) Title 1 funds were used for educational technology purchases nationwide. Title 1 targets improvement of academic skills in low-income schools. Previously, its money could only be spent for services or equipment that benefited specific students. Its recent reauthorization permits schools to make technology purchased with Title 1 funds available to all students in a school.

APPENDIX A

Groups Making SchoolNet Policy Decisions Prior to October 1996

	SchoolNet Interagency Council	Instructional Design Team	Technical Standards Review Committee	Technology Advisory Committee	Telecommunity Policy and Oversight Council
Superintendent of Public Instruction	x	x	x		
Department of Administrative Services	x		x	x	
Governor's Office	x			x	
Office of Budget and Management	x		x		
Ohio Department of Education: • SchoolNet office • Information Management Services • Professional Development • Policy Research and Analysis	 x x x x	 x x x	 x x x		 x x
OECN Data Acquisition Sites (formerly "A Sites")					x
Public Utilities Commission of Ohio	x			x	
Ohio Educational Telecommunications Network Commission			x	x	x
House of Representatives				x	
Senate				x	
Schools			x		x
Telecommunication providers			x		x
Computer industry			x		
State university education deans					x
Special Education Regional Resource Centers					x
Public and instructional TV stations					x
Catholic Conference of Ohio					x
Education Service Centers (formerly county boards of education)					x